RALEIGH AMATEUR RADIO SOCIETY

RARS

WORLDWIDE FRIENDSHIP

DAVE LANGLEY, W4YDY/K4IWJ
EDITOR

TOM ALEXANDER, WA4OTA
ASSISTANT EDITOR

"Raleigh Amateur Radio Society News"

SEPTEMBER-1971 ISSUE 23

****

MEET YOUR MEMBERS - PAUL THOBURN WB4MKY

Grinning at you this month is none other than the old six-meter specialist himself, Paul Thoburn, WB4MKY. Paul's hometown is Trenton New Jersey which he left in 1959 with his family for Wilmington, N. C. The many attractions of State University then lured him to the Capital city where he has remained ever since. He, wife, Bettie, and daughter, Sharon, live at 6802 Phillips Ct. Paul is presently employed as a Program Analyst for First Computer Services, which handles Cameron Brown's data processing.

Paul's great love is six-meter SSB, although you occasionally find him on 146.94 with the railroad gear FM'ers. He finally got his 70 foot tower up and is waiting for a rotor to spin his six-meter beam. Paul was first licensed in 1967 as WN4DFS & received his technician class in 1969 as WB4MKY. Paul has worked hard w/the six-meter group at each field day, and few will forget the cussing he put on his SB-110A at our first field day out on the Aerotron campus.....It has worked like a bomb ever since!

Paul got his first ticket while working at ITT here in Raleigh & claims to have gotten Bob Workman interested in CQ'ing. (Ellie Workman hasn't spoken to him since.) Paul also says that he is practicing up on his "toot toot" so he will be ready for the next club meeting - President Ed, you had better look out! Seriously speaking, a finer asset to the club cannot be found than Paul and any of you new six-meter boys should seek his advice, if you want to talk to an old hand.

********** Tom WA4OTA **********

NEXT MEETING

The next monthly meeting of the Raleigh Amateur Radio Society will be held Wednesday evening, September 1, 7:30 PM. Jim Carroll, W4COM, ITT Technical Staff Engineer, will present the program. He will discuss transmission line characteristics, the measurement and meaning of SWR & how to deal with it. Looks like Lee has another good program lined up for us.

The meeting will be held at the Civil Defense Headquarters in the basement of the N.C. State Government Administrative Bldg., 116 West Jones Street. Ample parking is available behind the building. Please enter through the back door. Visitors are welcome.

YAKKEY-DEE-YAK FROM THE EDITOR

Believe it or not, it's nearing election time for the offices of President & Secretary of the RARS. So, let me quote from our by-laws a part of Section 1(b).

"Nominations for all offices in the Society shall be submitted to the membership at the first regularly constituted business meeting in the month of October in the year in which the elections fall due. All nominations will be noted in the official minutes of the society by the Secretary. Elections by secret ballot shall be held at the first regularly constituted business meeting in the month of November following the nominations. The newly elected officers shall be invested w/ the rank of office at a meeting of the membership in the month of December following, and shall assume the duties of office as of January 1 of the new year."

At the September 15th Executive Committee meeting, nominations will be made and submitted to the October club meeting. Also, nominations can come from the floor at the club meeting. There is no rule forbidding a member to seek and campaign for an office. At the November club meeting the election will be held.

Last month in this column, I stated that it would be nice to see a lot more Novices, Advanced and Extras, & a total of no Technicians & Conditionals next year. So note Technicians & Conditionals, upgrade your license, don't quit. Everyone is valuable to the club.

When I got back from vacation, my electric bill was higher, the telephone is going to cost more, water rates are going to be raised, (gas rates went up a few months ago) we are going to buy some school buses, UGH, and to top it off, the state legislature has rated us with the CB'ers and raised amateur license plates 500%. I can't afford any more vacations like that!!!

---------- Dave, W4YDY ----------

PUBLISHED BY RALEIGH AMATEUR RADIO SOCIETY, INC., P. O. BOX 12541, RALEIGH, N. C. 27605 ■ ADVERTISING MANAGER – PAUL BROWNE, WN4PZW; TECHNICAL EDITOR – BERT BAILEY, W4FMN ■ OFFICERS: ED ALDERMAN, WA4PEN, PRESIDENT; LEE JOHNSON, WA4ZNA, VICE PRESIDENT; BOB WORKMAN, WA4ZZN, SECRETARY; BILL MCDOWELL, K4CIA, TREASURER ■ PRINTED BY QUIKCOPY, RALEIGH, NORTH CAROLINA.

DONATIONS SUPPORT RARS NEWS

The RARS NEWS has just received a cash donation from Phil Wicker, W4ACY, Roanoke Division Vice Director, for support of the paper. Gene Roberson, W4BBS, Pittsboro, made an earlier donation. We thank these fine radio amateurs very much, because the RARS NEWS is struggling with a very low advertising volume. Our paper has received very favorable comments. Let's hope financial reasons are not the cause of its early downfall. All members of the RARS can help look for possible advertisers. Contact Paul Browne, WN4PZW, for more info.

AMATEUR LICENSE PLATES - ARE THEY STILL WORTH IT?

This editor recently talked with Howard Twiggs, representative to the N.C. legislature fm Wake County, about the changes this summer in General Statute 20-81.1 which, until a short time ago, dealt exclusively with special auto license plates for amateur radio operators in North Carolina. The old statute which went into effect in 1955 and remained virtually unchanged until our latest legislature, provided that anyone holding a valid amateur radio license could, upon the payment of one dollar in addition to the regular registration and licensing fees, receive a current license plate with his call letters on it. Mr. Twiggs informed this editor that towards the end of the past legislative session a number of special licensing bills were introduced, including the current changes in G.S. 20-81.1. This new change came in the form of House bill 1292 introduced by a Mr. Lane Brown, an attorney and legislator from Albemarle, N.C., and apparently did two things: First, it hiked the costs of each special license plate from one dollar to five dollars, and second, it included class D citizens band radio operators within its provisions for special call letter plates.

Mr. Twiggs stated that he voted aginst this special bill as he did against several other special bills that were rushed through with little consideration at the end of the session (including one to allow doctors to use red lights and sirens on their personal cars when answering emergency calls). He did point out to me that an increase in fee was necessary because the State was losing money on the special plates and that the new five dollar fee barely meets the State's cost in each plate.

In regard to the recent amendment, this editor would like to make 2 immediate observations with which you may or may not agree:

(1) It cannot be denied that each individual plate benefits no one except each individual amateur who displays it upon his vehicle. In this sense, it is a very personal privilege. For this reason we should individually pay our own way for sucha privilege license if we want it. If these plates in fact cost the State about five dollars each, then we should foot the bill and no one can deny that the costs of just about everything have gone up these days.

(2) Is the license still a privilege? Our legislature obviously saw fit in the early 50's to honor amateur radio because of its numerous public service activities spanning a period of greater than 35 years. These services, to mention a few, ranged from disaster communications and message handling for soldiers, doctors and missionairies in far off places to the forming of the core of experienced communications personnel at the beginning of two world wars when this country was so desperately in need of such. As a hobby it was and still is well organized, self policing, highly skilled, and international in scope. Its licensing provisions remain stiff and provide incentive. The honor of a special plate was well bestowed. Now, this summer, in my opinion the legislature has lost sight of its original intentions. It has taken the honor out of the privilege license and made it simply a license for five dollars, (like the C B license for which you simply pay a fee). A privilege bestowed unthinkingly upon too many for too many reasons suddenly ceases to be a privilege. This is not to belittle citizens band radio, for properly and lawfully used it has a very valid place. But query, has it earned the privilege?

Tom, WA4OTA (former 5Q2565)

N-O-T-E

THE EDITORS INVITE YOUR COMMENT AND PERMISSION TO PUBLISH THE SAME

INCENTIVE LICENSING & FEES AGAIN!

Here are some excerpts from a letter written by Perry F. Williams, Assistant Secretary for Membership Service to a disgruntled ham blaming the ARRL for all his troubles.

"For instance, on "incentive licensing"--it began late in 1914 or 1915 when some amateurs, subjectively rated as superior, were able to obtain special calls (e.g.,8ZZ) and special wavelengths that other amateurs couldn't use at all. In 1922 the Extra First Grade license was created, with a 20 wpm code test. It carried, again, special frequency privileges not available at all to other amateurs. Then there was the "phone endorsment" in the late 20s and early thirties, followed by the Class A-B-C routine beginning in 1933. In fact, the only time we haven't had incentive licensing was from February 1953 to November 1967."

"ARRL" has always opposed fees with all the vigor at its command. In 1964 we took the matter all the way to the Supreme Court of the U.S. Unfortunately we -- and rich, powerful commercial communications interests, too -- were unable to overturn the FCC on this point. The television industry is supposed to be the most influential in the country; yet they've just been socked with grant fees as high as $ 50,000 and renewal fees which can go up to, perhaps, $ 75,000 a year. If this can happen to them despite the number of Congressmen with interests in the industry, do you expect the League to accomplish miracles? "Not that we aren't trying just the same. - - - By the way, what did you do about Docket 18802? Did you file? Did you write your congressman?"

-From the Collector and Emitter-

AUTO TAG DEADLINE FOR AMATEURS NEAR

If you desire a license plate with your amateur call letters, you will need to make application before November 1, 1971. This includes everyone even if you now have a plate. Application will be made on Form MVR-35 (Rev. 7/71) and sent with a $ 5.00 check or money order to Mrs. Nancy Davis, Special License Plate Section, Raleigh, N.C. 27611. You pay ahead of time now.

1971 ARRL N.C. STATE CONVENTION COMMITTEE

Chairman.....Ed Alderman....WA4PEN
Registration.....John Fried.....W4WWD
Facilities.....Bob Corns.....K4MC
Prizes.....Stu Meyer.....W2GHK/4
Programs.....Lee Johnson....WA4ZNA
Finances.....Bill McDowell..K4CIA
Publications.....Bob Workman....WA4ZZN

Advertising.....Paul Browne.....WN4PZW
Flea Market.....Buddy Storie.....WN4SDD
and
Warren Brainard....WB4DAR
XYL Program.....Ellie Workman.....
Sound System.....Mike Falzone.....K4PSP
Talk-In.....Chuck Littlewood...W4RUH

MINI-TECHNICAL REVIEW

AUGUST QST continues to invite hams interested to help wid de INTRUDER operation; if like write HQ pls. Can use all help. Having rec'd over 1000 requests fer templates to build the 2M Pipsqueak, now on-the-ball QST offers the Pipsqueak MKII. This one is better version, main diff being in use of conventional FM not the AM slope detection technique. Next is a fairly simple HB oscillator fer 2-toning linears complete wid rigid math to back it up. FB. After short QSO on cheaper keyer, follows FB poor-man's 575, a vy neat curve tracer. Then comes a 75-80 VFO es shades of OM Dickens, a Tale of 2 xtals, showing how us non Hew-Pack buyers can compete in the FMT. Fer the HPs of US Brawl II, build a FB Ham-M wid that old prop-pitch motor lying around on p36 (es also on p38 but, sri abt that, no p47s). Don't forget control ckt on p42 fer the motor. A really FB approach to portable opn is QSOd under the "Cabover KW," complete wid truck, twr, es 4B quad. Novel bit on HB DX Prediction, Novice '71 Roundup results, es usual vy FB reg features round out a typical issue u can't leggo till 73.

AUGUST HAM had leadoff primer on Freq Multipliers, tubes es SS. Brush up on the latest es then become mesmerized wid 2K linear-fer 144! GG wid Eimac 8877. Just give me time! How monitor 4 FM slots at once? Build scanner on p29. Gotta ck this one wid the Smith chart, but it looks FB, a VHF coax filter using 2-stud tuning. An IC function gen, "instant" PC boards (hope it's like instant grits!), basic ed on I Cs, how to mobile in a VW (ride the radio), Sensicon mods (hey you RARS guys), es wrapup of new WWV close out a top issue of a top mag.

AUGUST C Q starts wid several short QSOs, all FB, then lists results of 1970 WWDX A3 contest, including winners of our own Stu Meyer's trophy fer Contest Expedition. (He's won 'em all, so now he's giving 'em away.) The winners read like our economics, more non-US competitors raking it in--a real mix, VE, DK, KV, PJ, etc. NCSU was up there with multi-sgle xmtr class. Way to go W4ATC. Then read abt how much that new rig really costs using HS formulas you've long since forgotten perhaps. Then follows an auto - alarm that does everything but brew coffee fer the police, it sirens, flashes headlights, es flips on interior lights. 'Course apprehended thieves can plead wiretapping es get off but nothing like a good show, maybe. Giver 'er a go. The regular Propagation, QA(SSB sigs this time), Contest Calendar, Awards, Surplus (model 28 RTTY gear) es Ham Shop close out CQ's FB bid fer summer QSOing.

AUGUST 7 3 shows us Aerotron's "Shirt-Pocket" VHF-FM 2-way radio wid Po to 50 W available and then Leaky Lines QSOs dragging feet on VHF-FM, followed by kibitzing of the '71 ARRL Board Meet. Rotating 90° then, we QSO the Laccadives DXpedition, Facsimile I, a clever approach to hamming during camping, small HB 500W input Tiny Tim wid 2 ea 811As, 4-tube xcvr fer 80-40 cw (6EA8, 6BA6, 6GW8, 6146), usual blast vs ARRL, HB digital ckt fer ur VFO, es how to grab 15M sigs from Jupiter. Es then 73 sez 30 wid its study guide on antennas. All FB reading.

.....W4FMN.....

RARS ALERT

At the last RARS meeting, our own Prexy, Pink-Slip Ed, better known as WB4VBM, er that is WA4PEN, gave a vy FB pitch on the Regency HR2 2M FM xcvr. He covered it all. No doubt abt it; that's a really FB little rig. Got the clarity, punch, es versatility that a mobile needs. Ed brought out lots of added considerations, too. Nobody left till Ed had 73'd his QSO. And that's gotta be gud! A real neat bit of thot was put into a means of alerting all RARS hams..es others in the area fer that matter--in emergencies. This ole telephone roster I been working on fer months just doesn't cut the mustard,-- calling somebody during a hurricane or earthquake is not my idea of a profitable thing to be doing in a crisis, EVEN IF you could. So phone lines are down, out, or jammed. Take ur pick, no results. The Army tries the telephone roster with its disciplined clientele es they have mucho da problems. So how can us short-handed, sloppy, disorganized, lazy civilian types do it? I figger we cain't either. So, Ed, ur up. Ed sez let's rig up an alarm from a cheap off-the-shelf monitor that we can keep in the line 24-hrs. a day(cost? .004 dineros?) es when you hr. RARS DAYMAY you panic, jump into bed and pull the sheets over you fer protection. Better yet, as K4CQJ--Tom--suggests, using a RTTY toroid es capacitor, rig a coded tone to trip the alarm and then hissing, crackling, wid offsetting squelch to drown them out AS WELL as the ALARM is a situation that will be avoided. Tom's working on this modes we'll pass on the poop next issue. Meanwhile, any ideas, pls contact any of us RARS types es let's get heads together. We want an alarm that can be set off anytime without having to squelch sidetones with its attendant danger of squelching THE signal, that costs zilch, and that can be monitored on a freq available to the mostest. So tnx, El Presidente fer pursuing relentlessly an objective forever important.

W4FMN

RARS NET

The ole RARS 28540 club is amplifying more each Monday nite. While the would-be NCS adjusted his video amp (wideband that is), Bob W4CQJ took over the first net in August, and 10 members joined in. Real FB. Next week, NCS came in on SSB wid no carrier yet es we had 11 members. Real FB, gud QSOs es believe we are all becoming more learned in this ham business. So let's all turn out on Mondays when we can lsn in es xmt on 28.540 M H z at 2030 hours EDST. Don't have to be a RARS type, anybody can enter. Only req't: gotta have a license. ARRL takes a dim view of non-hams on the air. Inflexible, but good.....W4FMN

FOR SALE

Moving. Heath DX-60B with HG-10 VFO, both $ 75.00 Knight R195 receiver $ 35.00. All like new.. Gary Laird, K4RFD, 556-4096, Wake Forest

RUBBER STAMPS

Your name and call letters $1.25
Your name and call letters with your street, city, and state $2.90
Stamp Pad $1.10
Other Prices On Request

STAMP IT RIGHT
6420 Brandywine Rd.
Raleigh, N. C. 27607
Phone: 851-1973 or 467-9998

T U B E S V S S S

Are you one of the whippersnappers who says tubes are out, it's all solid state (SS) now?? Well, hang on, OM, I got news fer you. True, in microwave everybody is heading down the SS path like the lo bands. Microwave types have been slower because there is less experience to be shared. To begin, you must distinguish between amplifier and oscillator applications. In oscillators, microwave meets requirements for broadbanded, voltage-tuned oscillators best with a varactor-tuned transistor (out wid the old TWT), for lo power local oscillators wid a Gunn diode (out wid the reflex klystron), and for a lo power dopplar radar, the IMPATT (IMPact ionization and Avalanche Transit Time) diode works O.K. BUT for things like the CW Radar used with some of our missile systems to attack lo flying aircraft such as the HAWK system, the multi-cavity klystron wins out because-better noise features. Portable X-band radars are important to our armed forces these days (If only we had 'em in the early brawls!) es, true, YIG-tuned Gunns could deliver 100W peak in the X-band. But the single Maggie does have advantages over paralleled SS devices. So this "depends on the situation." But now, the CLINCHER. If ever any doubts were entertained aby my leading statement, dismiss them forever. 'Cuz, getting to something really IMPORTANT, you can use either 100 S-band microwave transistors es LSI techniques, (cost? even at a dollar a watt it would be abt 550 dollars) OR use, for 250 dollars, the gud ole WWII CW Maggie. Purpose? Nearly forgot,...Mom's OVEN, microwave type.

Wid amplifiers, it's no contest so far. Eventually, the pic will change, sure. But VTs will be around a long time yet. The problem wid SS right now at microwaves, is that hi-output transistors are now stuck in the L-S bands. Above 4GHz, lo noise requirements can be met only by the ole Varian TWT. 'Es maybe the TWYSTRON. (Will cover this tube in later issue). Also paralleling SS devices creates the same trub as at lower freqs-difficulty wid broadbanding and attenuation, to ignore such trivia as expense and people wid ideas like me. So there you have it my friends. Play wid the SS es SSB all you want. But I'll help win the next brawl, wherever it is or ARE, wid my big, big tubes es am while you fire the expensive, noisy GUNNS.

....807's ER, OOPS 73....Bert, W4FMN

RARS CALENDAR OF EVENTS

September 1	Regular Meeting	November 13-14	ARRL SS Phone
September 5	Shelby Hamfest	November 16	Executive Committee Meets
September 15	Executive Commitee Meets	November 20-21	ARRL SS CW
September 26	NC ARRL Convention/Raleigh	November 27-28	CQ WW DX CW Contest
October 6	Regular Meeting	December 1	Regular Meeting
October 19	Executive Committee Meets	December 1	FCC Exams/Wilmington
October 30-31	CQ WW DX Phone Contest	December 21	Executive Committee Meets
November 3	Regular Meeting	December ??	RARS Christmas party
November 3-4	FCC Exams/Winston Salem	Monday Ngts/8:30	RARS Net - 28.540 MHz

1971

YOUR INSURANCE
AGAINST DISASTER
CIVIL DEFENSE

RALEIGH AUG27'71 N.C. P.B. METER 875686 U.S.POSTAGE ≈.08

MR. CHARLES R. LITTLEWOOD
1400 CREECH ROAD
APT. 3
GARNER, N. C. 27529

Raleigh Amateur Radio Society, Inc.
Post Office Box 12541
Raleigh, North Carolina 27605